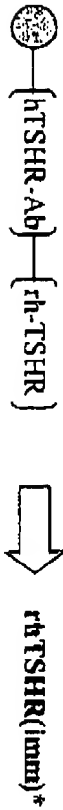


- The substance detected in both the present invention and in Bergmann *et al.* is the TSH receptor auto antibody (i.e., TSHR-auto-Ab)
- The structure immobilized in the present invention is the TSH receptor (i.e., TSHR)
- The structure immobilized in Bergmann *et al.* is the antibody against the hormone (i.e., TSH-Ab)

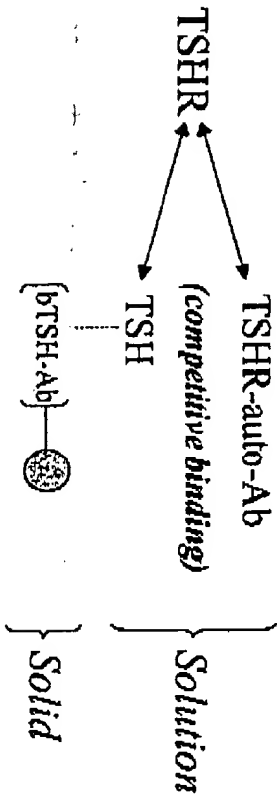
Present Invention:

rhTSHR(imm)* = immobilized and purified recombinant human TSH Receptor, i.e.,



- First step: rhTSHR(imm)* binds to TSHR-auto-Ab (TSH receptor auto antibody)
- Second step: Any rhTSHR(imm)* not bound to TSHR-auto-Ab binds to ¹²⁵I-bTSH (labelled bovine TSH)
- The amount of TSHR-auto-Ab can be determined by subtracting bound ¹²⁵I-bTSH (which can be quantified) from total amount of rhTSHR(imm)*
- The first and second steps can be conducted simultaneously.

Bergmann *et al.*:



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